

Stat of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt Governor

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October 4, 2002

CERTIFIED RETURN RECEIPT 7099 3400 0016 8895 4852

www.nr.utah.gov

Jerry Hascall
Deseret Generation and Transmission
12500 East 25500 South
Vernal, Utah 84078-8525

Re: Third Review of Notice of Intention to Commence Large Mining Operations, Deseret

Generation and Transmission, Diamond Mountain Resources Limestone Mine,

M/047/066, Uintah County, Utah

Dear Mr. Hascall:

On August 16, 2002, the Division received your response to our July 16, 2002 second review of your Notice of Intention to Commence Large Mining Operations for the Diamond Mountain Resources Limestone Mine, located in Uintah County, Utah. We have now completed the review of this latest information. The following comments that will need to be addressed before tentative approval may be granted.

The comments are listed below under the applicable Minerals Rule heading. Comments from the Division's July 16, 2002, review are listed first in normal font. There is no further comment if the previous submittal was adequate. Where a response was required, *italicized* comments are included where the operator's response has been determined technically adequate. Comments that are *italicized and bolded* include remaining technical deficiencies. Please format your response according to the organization of this review. Please address only the remaining deficiency items which are identified as *italicized and bolded* in this review.

You may send replacement pages of the original notice using **redline** and **strikeout**, so we can see what changes have been made. After the permit application is determined technically complete, we will ask that you send us two copies of the final complete and corrected plan. Upon final approval of the permit application, we will return one copy stamped "approved" for your records. Please provide a response to this review by November 4, 2002.



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The Division will suspend further review of the Diamond Mountain Resources mine Notice of Intention to Commence Large Mining Operations until your response to this letter is received. If you have any questions in this regard please contact me, Tom Munson, Paul Baker or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. We feel it would be very beneficial to have an on-site meeting where we could discuss the remaining issues and look at your reclamation work. Thank you for your cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg Permit Supervisor

Minerals Regulatory Program

D. Wayne Hed beig

jb
Attachment: Review
cc: Chauncie Todd, Ashley National Forest
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3rd REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Deseret Generation and Transmission Diamond Mountain Resources Limestone Mine

M/047/066

R647-4-101 - Filing Requirements and Review Procedures

The Division of Air Quality Approval Order #DAQE-698-99, Section 16 Open Area Limitations-A states "Storage piles generated by this operation cannot exceed 1.5 acres." During the Division's October 16, 2001, inspection the storage piles occupied an area greater than this amount. In addition, Section 16-B of the Approval Order says, "The area disturbed by this operation which has not been stabilized to prevent wind erosion shall not exceed 5.0 acres." This acreage limitation is also exceeded at the site. The operator needs to either revise the Air Quality Approval Order or modify the site so it complies with the Approval Order. (DJ)

The operator responded that the storage piles have been reduced to below 1.5 acres since last year's inspection and that this has been verified by a GPS survey. The response letter referenced areas labeled "Reject 9" and "Reject 10" which the operator contended should not contribute to the 1.5-acre stockpile limitation in the Approval Order. However, the permit application says "Reject 10" is soon to be fed into the crusher system. If the material will eventually be fed through the crusher then this stockpile should be considered as a part of the Air Quality 1.5-acre stockpile limitation. (DJ) (PBB)

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map

Map 2 indicates the area labeled H-5 is reclaimed. During the Division's October 16, 2001, inspection, it was noted that an active access road and a small laydown area were impacting this area. In order to consider areas reclaimed, they must not continue to be impacted by operations. Please revise your application accordingly. (DJ)

The operator's August 15, 2002, response letter says this area is no longer being used as a laydown area and that the operator disputes that the access road abutting the reclaimed area negatively impacts it to the point of removing it from consideration as being in the process of reclamation. Area H-5 was not removed from consideration because it abutted the access road. The area was not considered reclaimed because at the time of the October 16, 2001, inspection the area was being used as a lay-down area to store equipment and materials. For this reason, the Division considers it part of the disturbed area until the operator has requested release and the Division has given this release. The plan needs to be revised accordingly. (DJ)

Map 2 shows a 2.7-acre reclaimed area in the northwest part of the disturbed area. In the October 16, 2001, inspection, the Division noted tension cracks in the surface of this area indicating it is not stable. Therefore, the Division does not consider it to be adequately reclaimed. Additionally, it appears from the cross sections and maps that the operator

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intends to mine through this area, so it should not be considered reclaimed except on an interim basis. (PBB)

The operator's response to this deficiency is that the cracks on the slope have been filled, the slope is not unstable, and that it should qualify as successfully reclaimed until it is redisturbed at some point in the future. The Division is willing to consider release of this area, but release cannot occur until at least three years after the last augmented seeding. Until the area has met this time requirement and it has adequate vegetation (which it may already have), it needs to be included as part of the disturbed and bonded area. (PBB)

The map does not include the multiple product piles located immediately above the present mining area. (DJ)

Map 2 has been revised to include the stockpiles. (PBB)

The calculations in Appendix F were based on only 11 acres being disturbed; however, a GPS survey of the site on October 16, 2001, indicated that the total disturbances within the fenced area of the site totals 17.64 acres. Until some areas are adequately reclaimed, the minimum area affected by this operation will be 17.64 acres. The surety should be calculated to reclaim this amount of disturbance. (DJ)

The operator responded with a GPS survey of the entire impacted area conducted on July 31, 2002, as shown on Map 2. The total impacted area is 15.92 acres. About 4 acres are in the process of reclamation. Since some of the areas the Division included in the disturbed areas were strictly lay down areas where no soil or vegetation were removed, it may be possible to release some areas and reduce the size of the disturbed area to the figure the surveyor found. Until the Division releases these areas, however, the Division needs to consider the size of the disturbed area to be 17.64 acres. (PBB)

The reclamation treatments map does not indicate what treatments will be used within the area to be mined. Please cross-hatch, shade or color the areas to identify the reclamation treatments (i.e. ripping, regrading, mulching, seeding, etc) which will be applied to the areas to be reclaimed. The map indicates that the present area of disturbance is the only area to be mined; the permit application indicates a total of 48 acres will be disturbed. Please show an outline of the area to be affected by the ultimate mine plan. In section 106.3 (Estimated Acreage), a total of 48 acres are projected to be disturbed during the life of the mine. Please show on the surface facilities map where these facilities listed will ultimately be located. (DJ)

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The operator has provided a reclamation treatments map complying with these requirements. A problem with maps 4A and 7 is discussed in Section 106.6 of this review. (PBB)

Please indicate on one of the maps the sequence of mining for the next five years of operations. (DJ)

The operator has complied with this requirement. (PBB)

R647-4-106 - Operation Plan

106.3 Estimated acreages disturbed, reclaimed, annually.

As stated in R647-4-105.2: the present disturbance at the site is 17.64 acres. Until a portion of this disturbance is reclaimed and released, this acreage will be the initial disturbance associated with this plan. (DJ)

As discussed under Section 105.2 above, the areas that are in the process of reclamation are still considered as a part of the areas "affected" by the present operation. Before these areas can be considered reclaimed by the Division, DG&T must make a formal request for the Division to inspect and release the areas in question. A decision for release will be made by the Division based upon the results of the inspection. (DJ)

The operator's July 18, 2002, response letter to the Division's July 18, 2002, review states that the anticipated mine configuration may be revised by the operator, if circumstances so warrant and that the anticipated configuration shall not be construed as a limitation or requirement. At this time, the areas shown on the maps included with DG&T's NOI are a limitation of areas being considered in this permit. If DG&T wishes to expand beyond the areas shown, a permit amendment to the present plan must be filed with the Division and approved. (DJ)

106.5 Existing soil types, location, amount

Soils in the area vary in depth from up to forty feet in the swales and drainages to almost nothing on the ridges. Physical and chemical analyses indicate no limitations for reclamation. The baseline information is considered adequate to satisfy the requirements of this section of the regulations. (PBB)

106.6 Plan for protecting & redepositing soils

The application indicates an average of 12 inches of topsoil and 24 inches of subsoil are available to be salvaged. Map 7 shows areas to the west and east of the mine from which soil may be salvaged. It appears half of this material, six inches of topsoil and 12 inches of subsoil, would be used for reclamation of the mine area. The application shows no

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mining in the area from which soil would be taken, so the soil salvage areas would be essentially soil borrow areas. (PBB)

The operator did not salvage soil from the mine area before disturbance, and any soils that were in this area are contaminated to the point of not being usable. Because the mine is on a ridge, however, there was probably little soil to salvage. The Division is reluctant to have the operator double the disturbance size for the purpose of obtaining soil for an area that had little or no soil before mining. Instead, the operator should consider amending reject material (fines) or overburden with composted manure and seeding into this substitute soil. This would probably be much less costly that borrowing soil from adjacent areas. (PBB)

Before approving use of substitute soil, the Division needs to have a laboratory analysis of the type of material that would be used. The sample should be analyzed by a laboratory with experience in performing soils sample analyses. Because the Division does not expect the reject material to contain high salt concentrations or toxic elements, a complete analysis is not necessary. The parameters which the lab should analyze include: texture (sand, silt, clay, and coarse fragments), water holding capacity, pH, nitrate nitrogen, potassium and phosphorous. (PBB)

It is unclear from the application exactly which areas will be disturbed or redisturbed in the future (see Section 105.2 above), but the operator needs to salvage soils wherever they are available. If the reclaimed areas on the north side of the mine are redisturbed, soils in these areas need to be salvaged. Soil should also be salvaged and eventually redistributed in the area of the proposed water well. The application needs to discuss how much soil will be harvested from these areas and any other areas that will be disturbed. (PBB)

The application says that Map 2 shows the soil stockpile, but no stockpiles are shown on this map. The Division is not aware of any soil stockpiles currently on the site but anticipates that some soil will need to be salvaged and stockpiled in the future. In the plan for future operations, the operator needs to show where these stockpiles will be located. (PBB)

The operator commits to locate the soil stockpile where it will be protected from further disturbance and contamination. The stockpile will also be seeded and monitored in case remedial work is needed. Runoff from the stockpile will be contained at the base of the stockpile, and the runoff will be minimized by cross ditches. These commitments are adequate. (PBB)

Although it appears the plan for salvaging, storing, and redepositing soils is adequate, the operator needs to clarify this plan and may need to include additional commitments.

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The operator has committed to salvage all soils as far as practical. These soils vary in depth from nothing salvageable on the ridge to about 40 feet in the drainages. (PBB)

Under Section 106.6, the NOI indicates that six inches of soil material will be salvaged and stockpiled from an area of 17.6 acres. Although the operator has committed to salvage all available soil, Section 106.5(a) indicates there is an average of 12 inches of topsoil and 24 inches of subsoil available, substantially more than the six inches the operator committed to salvage. In addition, Section 106.6 says 28,411 cubic yards of subsoil will be stockpiled (average of 12 inches over 17.6 acres), but, as mentioned above, this same section of the NOI says only six inches of soil will be salvaged and stockpiled. The operator needs to correct or clarify the salvage and stockpiling commitments made under these sections. (PBB)

In Section 106.3, the NOI indicates that the waste material will be used in reclamation efforts and placed in such a way as to approximate natural slopes. It will then be covered with topsoil for revegetation. Fine reject material should serve adequately as a subsoil, especially if 12 inches of subsoil and six inches of topsoil can be placed over the reject material. The Division may have concerns if less than this much soil will be placed over the waste. The operator needs to disclose whether any areas will have bedrock as a substrate below the soil. If there are any areas with bedrock immediately below the soil, the operator may need to take additional steps to assure there will be adequate rooting depth for successful revegetation. (PBB)

Although the NOI indicates soil will be salvaged from a 17.6-acre area, it is not clear what this area is. The Division assumes it is the area originally measured by the Division as the disturbed area; however, soil salvage in most of this area would be impossible because it has already been disturbed. Please clarify what this 17.6-acre soil salvage area refers to. (PBB)

Maps 4A and 7 show a 12.2-acre soil borrow area, and although the operator has rejected the Division's suggestion to not use a borrow area, the NOI is not clear concerning how much soil would come from this area. (PBB)

The outline of the soil borrow areas needs to be clarified on Maps 4A and 7. On the east side of the mine area, there is a dashed line labeled on Map 4A as the area to be reclaimed after mining, but the topsoil borrow area extends beyond the limit of reclamation as shown on this map. The entire borrow area will need to be reclaimed. On Map 7 on the east side of the disturbed area, the map indicates soil salvage will occur between solid and dashed lines, but the map shows the topsoil borrow area extending farther to the east. (PBB)

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The operator took vegetation cover samples on three sites, one near the ridge adjacent to the mine, and one each in the west and east swales. Cover was not estimated by species; rather, only total vegetation cover, litter, bare ground, and rock are shown. Vegetation cover values were 16.9 percent for the ridge area and 69.5 and 62.5 percent for the swale areas. Based on this information, reclamation vegetation cover standards would be about 12 and 47 percent for the ridge and swale areas, respectively. (PBB

Although cover values are not broken down into individual species, Appendix A includes a general description of some vegetation communities. Sagebrush and needle and thread grass dominate much of the area described, but there are several other grass and forb species. The text of the application also lists some of the dominant species. (PBB)

The application needs to give the source for the narrative description of the vegetation information in Appendix A because it is unclear how site specific this information is. If the information is specific to the mine area, the Division can accept it, but if it is based on regional surveys, more information may be needed, such as a list of all species occurring in the mine area. (PBB)

The original NOI includes baseline vegetation information, but the Division asked the operator to clarify how site specific this information is. The operator's response letter gives the source of the information and says that Sherel Goodrich with the Forest Service has asserted that the vegetation at the mine site is typical to that of the areas cited in the vegetation report. Mr. Goodrich is a highly respected botanist, and the Division is willing to accept his assurance. The plan should contain a statement with this information. (PBB)

R647-4-107 - Operation Practices

107.1 Erosion control & sediment control

The plan does not describe how storm water drainage from the upper reaches of the pit and crusher pads will get to the sediment pond. Ditches will need to be built to transport this water. Please describe the design of these ditches and show their locations on Map 5. (TM)

The operator has complied with the requirements of this regulation. (PBB)

107.5 Suitable soils removed & stored

Salvage and storage of soils is discussed in Section 106.6 of this review. (PBB)

107.6 Concurrent reclamation

As the active pit is mined out and shifted, it will be reclaimed. The operator plans to minimize the size of the active disturbance and to try to keep the active disturbance under

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five acres. It may at times be necessary to have an active disturbance area of seven acres or more, and the operator does not want to be limited to five acres. (PBB)

The Division is willing to allow the operator to have an area of active disturbance of more than five acres so long as reclamation is progressing as much as possible. The operator should ensure, however, that this plan is consistent with the plan of operations and the environmental assessment submitted to the Forest Service. (PBB)

The NOI says reclamation will be an ongoing process. As the active pit is mined out and shifted, it will be reclaimed in accordance with methodologies described in the NOI. This commitment is adequate for the Division's purposes. (PBB)

R647-4-108 - Hole Plugging Requirements

Plugging costs for monitoring and water wells drilled under this plan, and reclamation of the affected areas (if needed) will need to be included in the reclamation surety estimate. (DJ)

The operator has complied with the requirements of this section of the regulations. (DJ)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems 109.2 Impacts to threatened & endangered wildlife/habitat

According to the Forest Service environmental assessment, there are no listed or candidate threatened or endangered species or sensitive species in the area. There is a potential that the mine could adversely affect four threatened and endangered fish species of the upper Colorado River drainage through water depletions; however, the EA says the mine would use a maximum of 4.7 acre-feet of water annually. The Forest Service expects the mine to actually use about one acre-foot annually. Both of these figures are well below the threshold limit of 100 acre-feet at which a mitigation fee is required by the Fish and Wildlife Service for projects with a connection to federal lands. (PBB)

No impacts to threatened or endangered species or their habitats are anticipated. (PBB)

109.3 Impacts on existing soils resources

If soils are salvaged and protected as the operator has committed to do, there should be little impact to the soils. The operator has complied with the requirements of this section of the regulations. (PBB)

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R647-4-110 - Reclamation Plan

110.1 Current & post mining land use

The application says both the current and postmining land uses are wildlife habitat, grazing, and recreation. The operator has complied with the requirements of this section of the regulations. (PBB)

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

The costs to drill, blast, and backfill the highwalls needs to be included in the reclamation surety calculations. (DJ)

Until such time that the Forest Service or the Division of Water Rights request that the sediment pond remain, the cost of reclamation of this feature needs to be included in the plan. If the structure is to remain, the operator will need to demonstrate long-term stability, a continued beneficial use, and a free-flowing or non-impounding design and include this information in the mine plan. (DJ)

The reclamation cost estimate has been revised to include the costs to drill, blast, and backfill the highwall. The estimate has also been revised to include the cost of reclaiming the sediment pond. The operator has complied with the requirements of this regulation. (PBB)

110.3 Description of facilities to be left (post mining use)

The only facility to be left after mining is the access road. This road is not being included in the mine permit area because the Forest Service has agreed to take responsibility for it, and this complies with regulatory requirements. (PBB)

The operator commits to reclaim the sediment pond, so the application complies with this section of the regulations. There is a comment in the application that the impoundment might remain after reclamation if the Forest Service or the Division of Water Rights determines it would be beneficial for livestock or wildlife. If this happens, the operator will need to amend the plan. (PBB)

110.5 Revegetation planting program

The text of the July 18, 2002, review is not included here. The operator has complied with the requirements of this regulation, and the following discussion is a synopsis of the revegetation plan.

According to this section of the application, the operator plans to use six inches of topsoil in reclamation, but additional subsoil will be used for added depth if and where it is necessary. As discussed in Section 106.6 of this review, the plan for salvaging and redistributing soil needs clarification. (PBB)

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The seedbed will be ripped to the depth of the replaced soil, or two feet, whichever is less. The surface will be left rough. These commitments are adequate to satisfy the requirements of this section of the regulations. (PBB)

The NOI includes a seed mix that has been approved by the Forest Service. Although the seed mix includes some species that may be difficult to obtain commercially, the species in this mix are adapted to the area and should be capable of stabilizing the soil surface and providing adequate vegetation cover and forage production. (PBB)

Seeding will be done in the fall using broadcast methods. The seed will be raked into the soil. (PBB)

The operator does not plan to use fertilizer, but will if fertilizer is recommended. Fertilizer should not be needed in any areas where the operator is able to salvage and use native soils, but an organic amendment needs to be applied if the operator uses overburden or reject material as substitute soil. Because the operator does not intend to use substitute soils, no change to the NOI is needed unless the operator changes the soil replacement plan at some time in the future. (PBB)

The operator commits to sprinkle or mulch the area if necessary, but the area receives enough precipitation that mulch and irrigation will probably not be needed. (PBB)

R647-4-111 - Reclamation Practices

111.5 Land capable of post mining land use

With proper reclamation, it should be possible to achieve the postmining land uses of grazing, wildlife habitat, and recreation. (PBB)

111.12 Topsoil redistribution

Topsoil redistribution is addressed in Section 106.6 of this review. (PBB)

R647-4-112 - Variance

No variances are requested.

R647-4-113 - Surety

The surety estimate will have to be resubmitted, taking into account the changes that may occur as a result of this review. (DJ)

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R647-4-115 - Confidential Information

The operator did not request that any information in the application be kept confidential. (PBB)

R647-4-116 - Public Notice & Appeals

When the Division has determined the plan to be technically complete, it will publish ad tentative approval notice. (PBB)

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